

TEACHER COMPETENCY TESTING AND
NATIVE AMERICANS IN MONTANA

by

Margaret A. Crennen

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APPROVAL

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Margaret A. Crennen

This professional paper has been read by each member of the author's graduate committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

May 22, 87
Date

[Signature]
Chairperson, Graduate Committee

Approved for the Major Department

May 22, 1987
Date

[Signature]
Head, Major Department

Approved for the College of Graduate Studies

June 10, 1987
Date

Henry L. Parsons
Graduate Dean

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ABSTRACT

Having instituted the teacher competency testing requirement for certification in Montana, it became important to determine if the requirement might result in an adverse impact for Montana's largest minority -- the Native American.

To obtain comparative data, the experience of other states was studied. What are the passing rates of Native Americans? Why don't minorities fare well on competency tests? What remediation programs have been implemented? What are landmark legal cases in competency testing? What steps must be in place to minimize the state's involvement in lawsuits? To obtain answers to these general questions, a survey instrument was sent to state certification officers in states that are known to have a Native American population.

Analysis of the data received showed that in a majority of the responding states, passing rates do indicate an excessive failure rate of Native Americans. It was also found that states have met with success in raising test scores of minorities by implementing testwise-ness courses, testing seminar classes, diagnostic testing and remediation programs. In addition, literature has shown that socio-economic status, language, and cultural barriers have been determined to play a role in the low scores minorities receive on standardized tests.

The profile of Montana's Native Americans implies that they, too, may experience the low scores on standardized tests that other states have reported. Montana should consider collecting data on minority pass/fail rates from teacher competency tests, and implementing a remediation program for test takers who have received failing scores.

CHAPTER I

INTRODUCTION

Teacher testing is one of the fastest moving changes in current educational reform. When J.T. Sandefur did his first "State Assessment Trends" in 1980, only 10 states had mandates to test. From these few states -- mainly in the southeast -- developed a nationwide trend. His current report, the sixth and last, shows only one state, Alaska, with no testing activity¹ (see Appendix A).

State policymakers have been very active in mandating teacher testing as a possible means to improve education, but far less action has been put into studying the impact on the teaching profession that teacher testing will have. Only recently have states become aware of the impact that testing is having on cultural and ethnic minorities.

Following the national trend, on July 1, 1986, Montana began to require that persons seeking a teaching certificate for the first time or seeking to renew a lapsed certificate must take the National Teacher Examination (NTE). This examination will also be required of teachers wishing to change levels of certification or teachers who have let their certificates lapse. However, very little data is available on the teacher competency test passing rates of Native Americans, that minority which composes the largest non-White group of Montana's population. According to the 1980 census, 37,623 of Montana's 786,690 residents (4.8 percent) are Native Americans. They also showed a

growth of 10 percent over the 1970 census. According to a printout from the Office of Public Instruction on May 6, 1986, there were 203 certified Native Americans employed in Montana public schools out of a total of 11,841 certified personnel (see Appendix B), which means less than 2 percent were Native Americans. With the introduction of NTE, will the passing rates of Native Americans taking the NTE be significantly lower than the passing rates of Whites taking the test? If indeed the NTE will create a decrease in the number of Native American teachers at a time when the population of Native Americans is increasing in Montana, this will create an even more disproportionate number than the 1.7 percent which already exists.

It is difficult for an Indian student coming into a public school, in which there are no Indian teachers, to look around and find someone with whom she/he can relate -- someone about whom she/he can say, "This is the kind of Indian person I want to be like." Many educators see the potential loss of role models as the most serious consequence of the trend toward fewer minority teachers. "That's the major thing at stake, especially in an era of disappearing families," said David G. Imig, executive director of the American Association of Colleges for Teacher Education. "The importance of good role models is well documented."² Thus it is important to see that Montana's teacher population is representative of its single largest minority -- the Native American. However, it is hard to determine the impact of the new testing procedures, because the Office of Public Instruction in Montana does not presently receive data that classifies candidates by

ethnicity. Their data simply lists the names of the candidates and their scores. Yet, it is important to project the impact.

The purpose of this research project, thus, is to examine the experience of other states and determine if Native Americans are scoring lower on teacher competency tests than are Whites. It will also attempt to seek out research conducted by other states to determine how minorities fare on competency tests compared with Whites. One other goal of the research is to discover if other states have implemented any programs in their educational institutions to deal with the issue of minorities failing the competency tests.

One of the most critical concerns to address is the legal issue. It is important to know what are considered to be the landmark legal cases in competency testing and what steps must be in place to minimize the state's involvement in lawsuits.

To obtain answers to these general questions, a questionnaire was sent to certification officers in states that are known to have a Native American population (see Appendix F). To obtain some insights into the Montana experience, interviews were conducted with John Voorhees, Montana's Teacher Certification Officer, and with Alan Zetler, who conducted Montana's validation study. Contact was also made with Edward Masonis of Educational Testing Service (ETS) (who is OPI's contact with ETS) and with Gerald E. De Mauro, Program Administrator of Teacher Programs and Services for ETS. It is believed that the experience from other states would provide lessons for public policymakers in Montana.

The type of data needed by this research project is sensitive, and not only is it difficult to obtain, but also costly; hence the dependence on secondary sources.

The paper is organized as follows: The second chapter of this paper will be a review of the current literature on teacher competency testing, and the third chapter will deal with legal problems involved therein. The fourth chapter will look at the experiences of other states, while the fifth chapter will trace the competency testing movement in Montana. The sixth chapter will review programs that other states are using in an attempt to raise the competency test scores of minorities, and the final chapter will contain the summary, conclusions and recommendations.

Notes

¹J.T. Sandefur, "State Assessment Trends," AACTE Briefs 7 (August 1986): 13.

²The New York Times, 9 February 1986: 1.

CHAPTER II

REVIEW OF LITERATURE

The public is insisting on excellence in American education; and in responding to the public's mandate for excellence, state legislatures and state boards of education have been forced to respond in various ways with solutions to complex problems in this context. One of the most visible responses nationwide has been the adoption of state mandated competency tests for the certification of teachers.

Teacher testing is not a new idea. For more than 125 years states used tests to screen persons for the teaching profession. In fact, teacher testing was predominant until the 1920's and 1930's when educational reformers urged that tests be abandoned in favor of rigorous preparation by first-rate teaching schools and colleges.¹ During colonial times, oral and written exams were administered by school boards. Later, the county superintendents were given the task of administering exams to the prospective teachers.² Only recently have paper-and-pencil tests once again become widely accepted and put into practice.

A recent study in the Phi Delta Kappan compared a modern teacher certification examination with one administered in 1876, and pointed out that a greater range of mathematical skills, concepts, and principles were required in 1876 while the National Teacher Examination and similar competency tests use a multiple choice format. The study

concluded: "Successful problem solving requires experience and practice in that skill, while successful multiple choice selection requires practice in taking such tests."³

What brought about the sudden new interest in teacher testing? While teachers are not newcomers to criticism, their competence came under increasing public scrutiny in the late 1970's, as states began requiring prospective teachers to pass skills tests to prove their basic ability. Statements such as: "Too many teachers are being drawn from the bottom quarter of graduating high school students"; and "the teacher preparation curriculum is weighted heavily with courses in educational methods at the expense of courses in subjects to be taught," were being widely circulated to the American public.⁴

The National Commission on Excellence in Education greatly accelerated the reform movement with the publication of its report, "A Nation at Risk: The Imperative for Educational Reform," on April 16, 1983. A Newsweek article reported that the National Commission had told the American public, "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war."⁵ The thrust of the report was that one of the fondest assumptions of American life-- progress from one generation to the next -- had been nearly shattered.

Each generation of Americans has outstripped its parents in education, in literacy and in economic attainment. For the first time in the history of our country, the educational skills of one generation will not surpass, will not equal, will not even approach those of their parents. The gains inspired by the challenge of Sputnik a quarter of a century ago have been squandered leaving a generation of young people ill prepared. At risk is our very future as a Nation and a people.⁶

It was this type of rhetoric from the "Nation at Risk" report that put the teacher testing movement into high gear.

Pros and Cons of Testing

Teacher certification or competency testing programs are currently being implemented and/or planned at three distinct stages.⁷ One of the stages is prior to entrance into teacher education. This testing can be done near the end of the sophomore year of college or at the beginning of the junior year as an entrance or screening exam for entry into the teacher education programs. Another stage is at the end of teacher education training. This is usually done near the end of the senior year, or sometime prior to the first year of teaching. Testing, thirdly, is also being used for certificate renewal. This type of testing can be administered whenever a state mandates that it be done. It is at this stage that there is strong opposition to the testing from teachers' organizations and unions. Teachers feel that their performance has already been reviewed in the classroom, and at this point in their careers testing becomes irrelevant.

One of the most prevalent reasons given for the adoption of teacher testing is that many states are worried about the quality of teacher education programs/students in their states. If a state has expressed concern over the competency of the recent graduates of teacher education programs in the state, or if they feel they have no control over the competency level of large numbers of out-of-state teachers who are applying for certification, they may consider adopting a certification competency test.

Sometimes teacher testing is done strictly for political reasons. It can be used as a political maneuver to make the public aware that the state is now demanding higher requirements for its teachers, which may in turn win state financial support for education programs in the state.

When using certification tests to mandate the quality of teacher education programs and the students who graduate from those programs, comparison of the test data can create friction among the schools. Montana's OPI has already decided to collect information that will provide data on where the candidates received their schooling. The public is entitled to this information when it pertains to public institutions. However, private colleges in Montana do not want this type of data circulated to the legislature. It is their opinion that since they do not use public funds, this data should not be for public scrutiny. According to Lynette Mohler, the Director of the Department of Education at Carroll College, they intend to give the NTE to sophomores and do not want the scores compared with scores of graduating seniors at other state institutions.⁸ When comparisons begin to take place, some argue that problems arise. Some institutions may do far better than others because of the different populations of students that often attend the various institutions within the state. When it eventually becomes obvious to the university faculties that their programs are being compared, then many succumb to teaching toward passing the test.⁹ More pressure is put on programs to get students to pass the tests. Some schools may weed out students whom they consider to be "high risk" before these students have the opportunity to get

into the program. These are all sensitive problems that states must consider when their first testing results begin to be studied. After all, if a state institutes a testing program, what is going to be done with the results? If the results are ignored, why give the test? While all of this is no argument against testing, it does mean that the test used must meet several standards, the most important of which for us here is that it must not fall more harshly on minorities than on Whites.

Having adopted this paper-and-pencil test as a means of assessing who can and who cannot be certified, it becomes important that policymakers, as well as the general public, have a full understanding of what standardized tests can and cannot do. Teacher tests can demonstrate that a prospective teacher: (1) has a basic knowledge of the subject matter planned to teach, (2) has the minimum pedagogical knowledge that experienced teachers and teacher educators consider necessary for beginning teachers, and (3) demonstrates certain of the basic skills of communication necessary to instruct children in an elementary or secondary school classroom. These are considered the standards that prospective teachers must meet before being certified by the state.¹⁰

It is also important to be aware of what the test cannot do. When we remember an outstanding teacher, what are the qualities that we recollect? Is it how much knowledge that person had? Or is it that the teacher was fair, dedicated, and caring? How can these latter qualities be measured? This suggests that teacher tests should be kept in their proper perspective -- they measure only a sample of the

knowledge required for teaching. Tests cannot be relied upon to identify who has the personal warmth, caring, drive, and dedication required of a good teacher.

Of course, there are educators who will argue that there is some basic knowledge that all teachers need. After all, doctors have medical exams and lawyers are required to pass the bar. They have an agreed upon body of knowledge. The literature in education reveals no real consensus on a body of knowledge that all must know; rather, it is the common opinion that flexibility rather than rigidity is in order. Another difference that arises is that when doctors, lawyers, and other professionals have to demonstrate a basic knowledge of their field in order to qualify for a state license, their examinations are generally based on the test's relevance to a person's duties after they are on the job. Teacher tests in the United States, on the other hand, traditionally have been validated on the basis of what is taught in teacher preparation programs before entering the profession. State licenses are considered a form of consumer protection; school children are the primary consumers of education and since it is the state's duty to see that they receive protection, tests will continue to be used as a means of assuring that protection. Excellence has been reduced to a quality measurable by scores on standardized examinations. Specifically, excellence in teaching has been operationally defined in the narrowest sense: a high score on a pencil-paper test.

Excellence Versus Equity

However, the issue of equity has been lost in the rush to mandate teacher testing, while the issue of excellence has taken precedence.¹¹ Cognizant of this, the American Association of Colleges for Teacher Education is proposing to set up a new research center to grapple with the issues surrounding the growing shortage of minority teachers. AACTE officials say that,

At the same time that the number of minority students is increasing and the need for specialized programs to reach their potential is apparent, there is a decrease in the number of minority persons who are becoming teachers.¹²

The AACTE cites teacher competency testing as perhaps the single most important factor contributing to the problem. Distinguished educators express their concerns. "These tests are a disaster for prospective minority teachers," said Peter Garcia, Dean for Extended Education and Government Relations at Pan American University in Edinburg, Texas. Gloria Scott, Vice President of Clark College in Atlanta, went so far as to call some of the effects of the current education reform movement, and the political motivations of a number of its elected leaders, "an eloquent manifestation of racism."¹³

The fulfillment of the American dream of equality and excellence in education is one that is shared by many. When critics of teacher education programs seek "quality improvement," defined most often as increases in standardized test scores for admission and certification, the focus on equity may diminish.¹⁴ This issue tends to be very serious for Native Americans.

John McQuiston and Rodney Brod, who are Professors of Sociology at the University of Montana, report that Native Americans do not wish to leave their folk culture behind. A relatively small population, Native Americans have not captured the imagination or eye of American society, while the educational goals of American society do not mesh with those of Native American tradition.¹⁵

The Black protest movement had as its center the goal of equal outcomes, and they opposed cultural education that would separate them from mainstream America. In contrast, the goal of Native Americans is to expand their cultural education. Native American protest would establish a different set of outcomes and educational goals. Native American reservations are largely undeveloped, and the Native American student is typically taught by a White teacher through the use of non-Indian language, examples, illustrations, and text materials. This largely rural and impoverished population of Indian children has the added burden of relating to urban, middle-class ideals.

Native American children who move to the urban areas are most likely to live in predominantly lower class neighborhoods because their families are poor. Although cultural mainstream isolation is not so likely among this population as among those on the reservation, barriers of social class, language, and social context still exist.¹⁶

It is important to improve our educational program without sacrificing equity for assumed quality. Equality of opportunity has been a recognized goal of society in the United States in areas such as education, housing, and employment. If Montanans support the idea of equality of opportunity in employment, then they must be aware of new

policies that the State has adopted that could have an adverse impact on the largest minority group in Montana -- the Native American.

If a problem is going to exist, the State must begin now to search for solutions. If sufficient data shows that Native Americans do score lower on the teacher competency tests, the State will have to deal with that problem. This is a complicated issue that will require intelligent solutions. In an effort to understand these issues, we will now turn to the legal issues, followed by an examination of the experience of other states.

Notes

¹Bernard R. Gifford. Excellence and Equity in Teacher Competency Testing: A Policy Perspective (ERIC: Syracuse University, Syracuse, New York, ED 270 494, 1986), 5.

²Russel B. Vlaanderen, "Testing for Teacher Certification," Issue-gram #7, ECS Information Clearinghouse.

³"Looking Forward by Looking Backward," Phi Delta Kappan 63 (February 1983): 430-431.

⁴Hoyt Gimlin, ed., Education Report Card: Schools on the Line (Washington, D.C.: Editorial Research Reports, Congressional Quarterly, Inc., 1985), 48.

⁵"Can the Schools Be Saved?" Newsweek, 9 May 1983: 51.

⁶Ibid.

⁷Rona F. Flipppo, "Teacher Certification Testing: Perspectives and Issues," Journal of Teacher Education 37 (March-April 1986): 6.

⁸Lynette Mohler, Department of Education, Carroll College, Helena, Montana, interview with author, 7 May 1986.

⁹Flipppo, op. cit., p. 14.

¹⁰Gregory R. Anrig, "Teacher Education and Teacher Testing: The Rush to Mandate," paper presented at American Association for Teacher Education Annual Convention, Denver, CO, 1 March 1985.

¹¹G. Pritchey Smith, Impact of Competency Tests on Teacher Education: Ethical and Legal Issues in Selecting and Certifying Teachers (ERIC: Syracuse University, Syracuse, New York, ED 154 493, 1984), 4.

¹²Blake Rodman, "Research on Minority-Teacher Shortage Planned," Education Week, 18 December 1985: 10.

¹³Ibid.

¹⁴Martha L. Bell and Catherine V. Morsink, "Quality and Equity in the Preparation of Black Teachers," Journal of Teacher Education 37 (March-April 1986): 16.

¹⁵John M. McQuiston and Rodney L. Brod, "Structural and Cultural Conflict in American Indian Education," The Education Digest (April 1985): 29.

¹⁶Ibid., p. 30.

CHAPTER III

LEGAL PROBLEMS

"One can almost make a prediction that anyone who gives a major competency test of any type is going to be sued," said Michael A. Rebell, a lawyer who has worked extensively on teacher testing issues. "The best educators can do to anticipate future legal action," he said, "is to execute the most sound, valid judgments possible."¹

The decision to use the National Teacher Examination (NTE) Core Battery as a certification requirement in Montana represented a major policy decision with legal ramifications impacting all levels of education in the state. Testing teachers raises legal questions of equity and fairness that are both constitutional and statutory. Under the 14th Amendment to the U.S. Constitution, which requires governments to give all people "equal protection" of the laws, courts through precedent setting cases such as Griggs v Duke Power Company² have determined:

that distinctions between individual teachers are valid as long as the distinctions are rational and have a legitimate purpose;

that intentional race- and sex-based discrimination among individual teachers is unconstitutional; and

that a test that has a disproportionate impact on women or minorities is valid only if it is properly used to distinguish between the qualified and the unqualified--it is invalid if used for a hidden discriminatory purpose.³

These general criteria make it possible to contest any testing program on grounds of race or sex discrimination. However, potential plaintiffs face serious problems.

In early court decisions, all the plaintiff had to do was to show disparate impact and sit back while the defendant tried to show that the test was absolutely necessary. Now the courts perform a totality of circumstances analysis, in which the impact is only one factor to be considered, and is balanced against legitimate state goals.⁴ It is not until the issue of the use of the test, perpetuating the effects of past discrimination, that the courts become interested in any history of past discrimination on the part of the defendant.

Statutory questions find legal basis in the 1964 Civil Rights Act (CRA). Title VII of the CRA prohibits discrimination. One type of discrimination identified is that of disparate treatment, where employers treat some people "less favorable than others because of their race, color, religion, or national origin." Another type of unlawful discrimination is that of disparate or adverse impact. This can be described as ". . . employment practices that are facially neutral in their treatment of different groups, but that in fact, fall more harshly on one group than another."⁵

The Courts have made it abundantly clear that a test, in order to pass judicial muster, must have some identifiably related relationship to the job for which the test is being used. This, of course, refers to validity; the Courts have called this "business necessity." This is illustrated in the precedent setting case of Griggs v Duke Power Company, a competency testing case heard by the United States Supreme

Court in 1971. Griggs was a class action suit brought by Black employees against Duke Power Company in North Carolina. In 1965 the company, consequent to the 1964 CRA, abolished its policy of racial discrimination in job hiring, and made a new policy for initial hiring and transfer. The criteria were high school graduation, and the passing of two aptitude tests -- the Wonderlic Personnel Test for general intelligence, and the Bennett Mechanical Aptitude Test. The Court, among other things, said that job related testing is acceptable under the CRA, but tests were required to measure the person for the job, and not the person in abstract.⁶

According to Richard Hammes, what is not acceptable to the Court, and what is illegal and unconstitutional, both at the state and federal levels, is arbitrary, capricious, unfounded, and discriminatory practices applied by the state to its citizens. This is also true for competency tests for teachers. The legal issue is not the testing itself, but the type, manner, application, and purpose of the testing that the state or its agencies have implemented.⁷

National Teacher Examination

The state has the power and the right to use any means it chooses to fulfill its compelling interest, which, in the case of teacher testing, means the quality of education in the state. However, it must be in compliance with state law and the state constitution, yet ought not be repugnant with federal law and the federal constitution. Virtually all the litigation about testing teachers has focused on the NTE, developed by the Educational Testing Service (ETS). The NTE is

the most widely used test for prospective teachers, and so it has received the most attention. It measures the minimum amount of academic knowledge an individual should possess upon entering the teaching profession, and the ETS does not recommend any of their tests for any other use. The ETS also recommends against using arbitrary cut-off scores and sets no such score itself. This is left for the individual states to determine the appropriate minimum requirements.

A milestone case in the legality of the use of the NTE occurred in United States v South Carolina.⁸ The State of South Carolina used the NTE for teacher certification and salary increases of public school teachers. For over 30 years the state and its agencies had used scores from the NTE for certification and amount of state aid payable to districts. Local boards used scores on the NTE for selection and compensation of teachers. In June 1975, after a validation study by ETS, and a review of this study by the Board of Education Committee on Teacher Recruitment, Training, and Compensation, and the Department Staff, the State of South Carolina established new certification requirements involving different minimum scores on various areas of teaching specializations. Plaintiffs challenged each of the uses of the NTE, contending that more Blacks than Whites historically have failed to achieve the needed scores, thus creating a racial classification in violation of constitutional and statutory provisions (disparate impact). Although this case is much involved in the issue of discrimination, the United States Supreme Court did find the NTE to be job related, and allowed the use of it in South Carolina.

This summary decision of the United States Supreme Court, offered without a written opinion, has been used as the basis on which other states have built their validation process. The validation procedures are designed with the following findings from the Court decision in mind:

The state can use the test [NTE] to certify teachers;

The state has the right to adopt academic requirements and to use written tests designed and validated to disclose the minimum amount of knowledge necessary to effective teaching;

The NTE tests in the South Carolina case were shown, in themselves, not to discriminate on the basis of race. Furthermore, there was no intention of the test to do so;

Through a validity study conducted by ETS, the test instrument was shown to possess content validity. The study utilized the panel approach for making judgments.⁹

States must be sure that they adhere to the following guidelines if they wish to use competency testing for certification: (1) standardized tests can be used; (2) content validation must be performed; (3) job relevance must be evident; (4) judgments of minimally qualified candidates' anticipated performance (knowledge estimation) is acceptable; (5) the pooled judgments of qualified persons representative of the professional population is a proper vehicle for validity studies; and (6) in the absence of intended discrimination, test results can be uniformly applied to all groups, including minorities.¹⁰

Test critics maintain that the Court's decision in the South Carolina case cannot be automatically extended to include the use of teacher competency testing in general or, in fact, to all states requiring a certifying examination. These critics also contend that

although competency tests are employed to achieve a valid purpose-- improving the schools -- official knowledge of the test's disproportionate impact on minorities makes unintended discrimination intentional.¹¹

According to Hammes, among the conclusions that can be drawn from the legal developments of teacher competency tests are the following:

The NTE has been ruled by the United States Supreme Court as rationally relevant to the professional practice of teaching, and thus, can be used as a criterion for certification, employment, and salary increases.

The use of the NTE as the sole criterion for re-employment has been questioned by the Courts, and has been disclaimed by ETS itself, the originator of the test. The United States Supreme Court has not dealt with this issue.

The State cannot use means which are arbitrary, capricious, or discriminatory. Thus, when a State uses competency testing, it must be rationally related not only to a legal and acceptable state goal, but also to the job, or job related.¹²

In order to use the NTE legally, the state must "validate" the exam -- a process that ensures that each test question measures what it is supposed to, reflects knowledge that teachers in that state really need to know, and consists of information that the test taker had a previous opportunity to learn. However, local validation is very important when using nationally developed tests, because questions that are appropriate nationally may not be appropriate in a particular state. Too many of these questions make a test unfair at best, and useless at worst. They may also open the door to potential lawsuits.

Validation in Montana

The Montana validation study was designed to satisfy legal and educational demands that arise when a test for teacher certification is adopted by a state. The study was conducted to determine content validity and job relevance. It studied selected areas of academic knowledge, and it in no way was designed to measure or predict other qualities necessary for effective teaching.¹³

The NTE Core Battery, chosen for use in Montana, tests academic knowledge in three preparation areas common to college teacher education programs: communication skills, general knowledge, and professional knowledge. Six hours are required to take all three parts of the Core Battery. Applicants who fail any of the three areas will be allowed to retake the failed portion, with no limits on retakes.

The validity study asks three questions:

- (1) Is the content tested by the NTE Core Battery relevant to the job requirements needed by a beginning teacher in Montana?
- (2) How well does the content measured by the NTE Core Battery match the content of the teacher education programs offered in Montana?
- (3) What estimated knowledge scores should the state expect of a minimally qualified candidate on communication skills, general knowledge, and professional knowledge?¹⁴

These questions pose the issue of fairness to the candidates as against the minimum level of performance needed to protect the State's interests.

Validation studies of the type designed for Montana have to take place before any actual test scores are available. Given the absence

of normative test results (the results of previous test takers in the state), the validation must instead be "criterion-referenced" (based on the questions in the test). This procedure has been acceptable both educationally and legally when the judgments of representative experts are used to determine criterion levels.

Alan Zetler, who conducted Montana's validity study, said that expert judgment was the premise for the Montana study. The raw data needed to research the questions were collected from public school and higher education professionals using a structured response format.¹⁵

In Montana, 72 professionals qualified for the task of validation, who were representative of teacher training and certified elementary and secondary staff, were chosen for the panel. These professionals were also representative of the general certified teaching population by sex, ethnicity, school size and geography. Two Native Americans were also included on this panel.

In Zetler's report of the validation study, it should be noted that under the subject "Topics in Curriculum Identified by Panel Members as Not Included in the Literature and Fine Arts Test," the following were listed: music, literature and experience of Native Americans, artists, art theory, appreciation of visual and performing arts, and movement and dance.

The Montana study scores obtained through this validation process were: Communication Skills, 652; General Knowledge, 648; and Professional Knowledge, 652. Following the practice in other states, the scores recommended to be used as qualifying scores (which were adopted by the Montana Board of Public Education) were four points lower than

the study scores. Among the reasons for adopting the lower scores are:

- (1) A desire to give the benefit of the doubt to candidates who score near the qualifying score;
- (2) A desire to keep the pool of minority certificate candidates higher;
- (3) An attempt to minimize possible litigation, and to take into account the limitations of testing itself and the limitations of the Core Battery as applied to a state's peculiar situation.¹⁶

Besides setting the scores, the study advisory forum made these recommendations:

The Office of Public Instruction be designated: (a) the depository of all the raw study data, to be used in case of legal challenge, and the need for study repetition/tracing and other appropriate research; and (b) the agency responsible for disseminating and interpreting the study and monitoring the impact of adopted scores.¹⁷

The advisory forum also recommended that under the assumption that adopted scores will be examined and possibly reset within a 3-5 year period, procedures should be established to collect and interpret normative data.¹⁸

With the adoption of teacher competency testing has come not only the problems of deciding on a test, and validating it, but also the long-run problems of legal considerations and ethical issues which arise from its implementation.

The next chapter will look at the results of the survey conducted to determine how Native Americans fare on teacher competency tests in other states.

Notes

¹Lynn Olson, "Investing in Teacher Test: Issues for the States Are Complex," Education Week, 6 November 1985: 1.

²Griggs v Duke Power Company, 401 U.S. 424 (1971).

³Patricia M. Lines, "Testing the Teacher: Are There Legal Pitfalls?" Phi Delta Kappan 65 (May 1985): 619.

⁴Joyce Beach, Fourteenth Amendment Considerations and Competency Testing (ERIC: Syracuse University, Syracuse, New York, ED 256 871, 1983), 21.

⁵Washington v Davis, 426 U.S. 229 (1976).

⁶Richard R. Hammes, "Testing the Teacher: A Legal Prospective," Action in Teacher Education 7 (Fall 1986): 18.

⁷Ibid., p. 15.

⁸United States v South Carolina, 434 U.S. 1026, 1976, 445 F Supp. 1094 (D.S.C. 1977).

⁹Alan G. Zetler, Montana Validation of the NTE Core Battery, Board of Public Education (January 1986), 6.

¹⁰Ibid.

¹¹Hammes, op. cit., p. 18.

¹²Ibid., p. 19.

¹³Zetler, op. cit., p. vii.

¹⁴Ibid., p. 3.

¹⁵Ibid.

¹⁶Ibid., p. 63.

¹⁷Ibid., p. 67.

¹⁸Ibid.

CHAPTER IV

TESTING EXPERIENCES IN OTHER STATES

Introduction

Can Montana expect the same effects of competency testing on their professional pool of Native American teachers as other states have felt on their professional pool of Black and Hispanic teachers? Will Montana's Native American teacher candidates have a higher failure rate than the White candidates taking the same test? Enough evidence is now available from states with several years of experience in using tests as part of the certification process, and from states that have completed initial validation studies, to indicate that disproportionate numbers of Black and Hispanic minority students are being screened out of teaching. In fact, initial reports of minority performance have proved to be a source of embarrassment in many states; so much so that it is far easier to obtain data from newspaper sources than from state certification departments.¹

Statistics collected by states using teacher testing programs show significantly higher rates of passing for Whites than for Black and Hispanic candidates. For example, in California, 38 percent of all teacher candidates, but 71 percent of Blacks and Hispanics failed the college-level basic skills test. Eighty-three percent of those who took Florida's teacher certification examination in 1982 passed each of

its four parts, while among Blacks the figure was 35 percent. When students took a competency test required for admission to colleges of education in Texas, 62 percent of the Whites passed all three sections of the test compared to 10 percent of the Black and 19 percent of the Hispanic test takers. The overall pass rate on Oklahoma's subject matter examinations is 80 percent. The rate for Blacks is 48 percent, and 58 percent for Hispanics. These figures have led to a prediction that "within the decade, the minority teaching forces will be less than 5 percent, compared to 12 percent in 1980."²

A questionnaire (Appendix F) was designed by this researcher to answer the following:

- (1) Does the State collect data by ethnicity?
- (2) Will the State release this data?
- (3) Is the State actively recruiting minority students into the teaching profession?
- (4) Is the State involved in programs designed to raise test scores of minority candidates?

The questionnaire was mailed to state officers in charge of teaching certification primarily in western states. According to Alan Zetler, the standardized test scores from the Rocky Mountain Region tend to be higher than from other regions in the United States.³ While it would be appropriate to gather data from states whose students perform similarly on standardized tests, it was also necessary to select states that could be expected to have Native Americans taking the test, and that would have had the test in place long enough to have gathered data. Questionnaires were sent to two state officials in New

York. Since New York's population is so large, it seemed possible that there would be Native Americans who would have taken the test. Also, the test has been in place long enough in New York for data to have been collected.

Questionnaires were sent to fourteen states. Every state official receiving a questionnaire responded. However, many of the responses were simply, "No, not yet," and "Do not know." Many of the states are simply not yet collecting the type of data the questionnaire requested. This could very well be due to budgetary constraints. At Montana's OPI, no new personnel have been added to take care of the reporting and recording of test scores. While this data can be purchased from ETS, it is very expensive and state departments of education would need extra funds to pay for this data. It may be necessary to create public awareness of the need to collect such information in order to generate funding. Only one state, Oregon, responded to the question regarding programs that were designed to improve test scores. Therefore, secondary sources were used.

Testing in Other States

Arizona

Arnold M. Gallegos, a professor at Northern Arizona State University, has reported that in Arizona they are indeed feeling the impact of teacher competency testing. He maintains that there is a cultural bias in competency tests for Native Americans. The section in the Arizona Teacher Proficiency Exam (ATPE) on reading covers culture laden subskills such as figurative language and homophones. He

concludes his article with the declaration that we are witnessing a disproportionately high failure rate among minority students on competency tests, which correlates poorly or not at all with performance on the job.⁴

The ATPE, which is used for certification in Arizona, consists of a basic skills section and a professional knowledge section. The basic skills portion is designed to measure proficiency in reading, grammar, and mathematics. The professional knowledge portion includes classroom management, curriculum and instruction, assessment and evaluation, theories of growth and learning, education foundations, and organization and administration.⁵

Table 1 lists results received for test administrations for 1986 from the Arizona Department of Education.

Table 1. Arizona Teacher Proficiency Exam results by ethnicity basic skills component, 1986.

Ethnic Group	Number Tested	Percent Passing
White	3,852	81.8
Black	58	39.6
Hispanic	181	60.7
Indian	94	35.0
Asian	23	73.9
Total	4,208	79.2

Source: Based on information received from the Arizona Department of Education.

California

California uses the California Basic Education Skills Test (CBEST) for teacher certification. CBEST is described as being almost a "clone" of the Pre-Professional Skills Test (PPST). The PPST specifications are a subset of the NTE Core Battery specifications and were not developed independently. Though the items in the two sets measure the same skills, they are a different set of items, and other than in the first form of the PPST do not overlap with the Core Battery tests. CBEST was designed for the purpose of providing a general measure of basic proficiency in reading, writing and mathematics. The main difference between the PPST and the CBEST is that the PPST has a writing component composed of an objective (multiple choice) section and a written essay; whereas the CBEST has two written essays.⁶

Table 2 shows the performance from the Fourth Annual Report on CBEST Passing Rates. In Table 2, Native Americans are grouped in with "Other Groups." In responding to the request for separate data on Native Americans, Richard W. Watkins, the California Commission on Teacher Credentialing's Consultant for Planning and Research, reported that the Native American group was not separately identified in the Annual Report because of the relatively small numbers of examinees in this group. However, he did send the information found in Table 3 for the purpose of this research.

Table 2. California CBEST passing rates for first-time test takers grouped by self-reported ethnic group membership.

Ethnic Group	1983-84		1984-85		1985-86	
	Number Tested	Percent Passing	Number Tested	Percent Passing	Number Tested	Percent Passing
Asian-Oriental	1,124	55	1,213	56	1,125	62
Black	1,963	30	2,287	33	1,997	36
Mexican American	2,116	38	1,720	46	1,759	50
Other Hispanics	665	43	653	41	754	48
White	30,553	76	32,110	81	33,563	82
Other Groups	1,505	50	1,630	51	1,421	49

Source: California Commission on Teacher Credentialing.

Table 3. Number of examinees and percent passing the CBEST in California on the first attempt for those who classify themselves as American Indian, Eskimo or Aleut.

Year	Number Tested	Percent Passing
1982-83	361	67
1983-84	312	63
1984-85	278	64

Source: Richard W. Watkins, Consultant, Examinations.

The California Commission on Teacher Credentialing puts out a thorough annual report that provides significant findings on teacher competency testing in California. Among the findings are:

- (1) The impact of the CBEST requirement on the supply of potential teachers for bilingual classrooms has been noted and discussed by many. A panel convened in April, 1985, to review the CBEST for possible ethnic group bias also discussed in their report some of the aspects of standardized testing in general that could contribute to these lower passing rates.⁷
- (2) Although passing rates for ethnic minority groups have increased, it is evident that the CBEST is continuing to have an adverse impact on the numbers of non-White people who might enter the teaching profession.⁸
- (3) It has been established that both academic and test performance of majority and minority groups are related to a number of socio-economic factors.⁹
- (4) There are a variety of factors to be considered in drawing conclusions from data on institutional passing rates obtained on a basic skills test. Any conclusions about the effectiveness of institutional programs based on such passing rates must take into account the diversity among such institutions on other very important factors.¹⁰

Colorado

The data from Colorado is derived from a pilot test of over 400 teacher candidates just completing their teacher education program in Colorado's colleges and universities, who took the NTE to compare their knowledge and preparation as future teachers with those of the rest of the nation. This data was released from the Colorado State Department of Education on September 12, 1986. Tables 4, 5, and 6 show the results of that test. Colorado did not specify all racial/ethnic groups.

Table 4. Number and percent of Colorado candidates who would have failed using the lowest cut-off score of any state.

Test Area	State	Cut-off Score	Number Who Would Fail			
			All Candidates		Minority Candidates	
			Number Tested	Percent Failing	Number Tested	Percent Failing
Communication Skills	TN	640	7	1.6	4	9.5
General Knowledge	TN,KY	637	4	0.9	1	2.4
Profess'l Knowledge	NM	630	1	0.2	0	0

Table 5. Number and percent of Colorado candidates who would have failed using the highest cut-off score of any state.

Test Area	State	Cut-off Score	Number Who Would Fail			
			All Candidates		Minority Candidates	
			Number Tested	Percent Failing	Number Tested	Percent Failing
Communication Skills	IN	653	53	12.4	11	26.2
General Knowledge	CA	660	128	29.6	24	58.5
Profess'l Knowledge	MT	648	29	6.6	5	12.5

Table 6. NTE Core Battery results by race/ethnicity of teacher candidates.*

Test Area/Ethnic Group		Number Tested	Mean Score	Percentile
Communication Skills:	White	373	666	66
	Hispanic	27	655	34
	All Minorities**	42	658	41
General Knowledge:	White	379	666	66
	Hispanic	26	648	27
	All Minorities**	41	657	39
Professional Knowledge:	White	383	664	69
	Hispanic	24	656	45
	All Minorities**	40	659	53

*Separate scores are reported only for Hispanic student teachers because of the low number of examinees in the other racial/ethnic groups.

**Includes Hispanics.

Source: Colorado Department of Education.

Kansas

Kansas requires the PPST and the Professional Knowledge section of the NTE for certification. Kansas shows very high percentage passing rates for Native Americans. However, only four Native American candidates took the Professional Knowledge test, which means that only four will be eligible for certification since both the PPST and the NTE are required. The high scores for Native Americans in Kansas could be related to the fact that historically the Haskell Institute, which is located in Lawrence, Kansas, has been considered one of the finest educational institutions for Native Americans in the United States.

Table 7 shows these scores.

Table 7. Kansas Precertification Examination performance by race/ethnic origin.

Ethnic Group	PPST Reading				PPST Math				PPST Writing				NTE Professional Knowledge	
	Number Tested		Total P.P.*		Number Tested		Total P.P.**		Number Tested		Total P.P.*		Number Tested	P.P.*
Black	46	76.1	80.4		51	54.9	66.7		50	68.0	76.0		7	57.1
Hispanic	31	80.6	83.9		32	81.3	84.4		31	61.3	71.0		11	81.5
Native American	19	94.7	94.7		20	85.0	95.0		20	85.0	90.0		4	100.0
Oriental (Asian)	11	72.7	72.7		10	90.0	90.0		12	66.7	66.7		1	100.0
White	3131	92.3	95.3		3127	93.1	95.5		3127	93.4	96.6		1311	96.7

*Percent passing, first attempt.

**Percent passing, including retakes (not available on Professional Knowledge).

SOURCE: Based on information received from the Kansas State Department of Education.

New Mexico

New Mexico began using the NTE Core Battery for certification in 1983. Table 8 shows the information sent by their Department of Education on passing scores. New Mexico also included information on the projected number of Native Americans who would be eligible for certification if the state adopts newly recommended cut scores. Their projections show that if the Communication Skills pass score is raised from the present 644 to 656, 30 percent will pass; if the General Knowledge pass score is raised from 645 to the recommended 657, 22 percent will pass; and if the Professional Knowledge score is raised from 630 to 642, 67 percent will pass. Table 8 lists the current passing scores.

Table 8. Percent passing the NTE Core Battery in New Mexico through 1985 by ethnicity.

Populations Tested	Communication Skills Percent Passing	General Knowledge Percent Passing	Professional Knowledge Percent Passing
Total	92	88	99
Male	89	91	98
Female	93	87	99
White	96	94	99
Hispanic	83	72	97
Native American	55	52	91
Black	82	65	98

Source: New Mexico State Department of Education.

New York

New York uses the NTC Core Battery for certification. Table 9 shows the results of the October 1986 test administration and Table 10 shows the results of the October 1985 administration.

Table 9. Number taking and percent passing October 1986 NTE Core Battery tests in New York State, by self-reported ethnicity.

Populations Tested	Communication Skills		General Knowledge		Professional Knowledge	
	Number Tested	Percent Passing	Number Tested	Percent Passing	Number Tested	Percent Passing
Black	273	47	316	40	209	59
Mexican American	4	25	5	80	2	50
Native American	20	75	20	85	20	75
Asian	33	42	27	59	27	48
Puerto Rican	97	39	111	30	85	56
Other Hispanic	50	50	57	37	37	62
White	3,834	86	4,095	79	3,251	90
Other	76	67	77	73	63	73
No information	353	67	439	56	337	72

Source: Based on information received from the New York State Education Department, Division of Teacher Certification.

Table 10. Number taking and percent passing October 1985 NTE Core Battery tests in New York State, by self-reported ethnicity.

Populations Tested	Communication Skills		General Knowledge		Professional Knowledge	
	Number Tested	Percent Passing	Number Tested	Percent Passing	Number Tested	Percent Passing
Black	232	49.1	245	42.0	197	60.4
Mexican Am./Chicano	8	75.0	6	33.3	6	83.3
Native Am./Alaskan/ Aleut	26	69.2	31	77.4	29	82.8
Pacific/Asian Am.	45	40.0	41	58.5	42	64.3
Puerto Rican	92	42.0	102	36.3	85	50.6
Other Hisp./Lat. Am.	79	49.4	86	41.9	68	50.0
White	4,649	85.7	4,753	80.3	3,932	88.8
Other	73	54.8	76	57.9	70	54.3
No Information	440	71.6	494	61.7	403	74.4

Source: Based on information received from the New York State Education Department, Division of Teacher Certification.

Oklahoma

Oklahoma uses the Oklahoma Teacher Certification Testing (OTCT) program for certification. This test is described as being criterion-referenced and competency based. It is designed to measure a candidate's knowledge and skills in relation to an established standard of competence rather than in relation to the performance of other candidates. Table 11 shows testing results of the OTCT.

Table 11. Oklahoma Certification Testing program test results by ethnicity (January, April, July 1982; December 1983; and February 1984).

Ethnic Group	Number Tested	Percent Passing
Black	220	45
Hispanic	34	71
Native American	174	70
Oriental	11	82
White	8,284	79
Other	36	92
All	8,759	78

Source: G. Pritch Smith, Impact of Competency Tests on Teacher Education: Ethnical and Legal Issues in Selecting and Certifying Teachers (ERIC: Syracuse University, Syracuse, New York, ED 154 493, 1984), 57.

Oregon

Oregon uses the CBEST for teacher certification. Since Commission adoption of the requirement for basic skills testing of certificate candidates, more Oregon teacher education institutions require satisfactory CBEST scores for admission to professional preparation.

programs. Oregon's current report of testing results notes that in general, passing rates for most minority groups are lower than for test takers identifying themselves as White. Such differences among pass rates for members of ethnic minority groups are not unique to CBEST, nor to this year's group of test takers whose performance parallels that reported for minority groups in 1984-85. Of interest to teacher educators and the public is the number of individuals in specific ethnic minority groups taking CBEST in comparison to those the previous year. Table 12 shows the pass-fail status by ethnicity for Oregon candidates taking CBEST for the first time during 1985-86.

Table 12. Ethnicity by pass-fail status for Oregon candidates taking CBEST for the first time (August 1985 through July 1986).

Ethnic Group	Number Tested	Percent Passing
No response	160	75.63
Native American	33	69.20
Asian	64	68.75
Black	37	40.54
Mexican American	39	56.41
Puerto Rican	5	100.00
Other Hispanic	22	68.18
Pacific Islanders	23	52.17
Filipino	6	100.00
White	4,737	79.84
Other	52	71.15
Total	5,178	78.83

Source: Based on information received from the Oregon Teacher Standards and Practices Commission.

While the increase in number of test takers in most specific minority groups resembled that of the total group, doubling in size, from the first to second year of Oregon CBEST administration, the

number of Blacks taking CBEST in the second year was four times that of the previous year, and the number of Pacific Islanders increased from two individuals in 1984-85 to twenty-three in 1985-86.

Also reported is that while ethnic minority group members represent less than 5 percent of the total group first attempting CBEST, these individuals represent 10 percent of the group retaking the basic skills test. The passing rate of Whites reattempting the test is 65.7 percent, while only 45 percent of minority test takers obtain satisfactory scores upon retake.

Summary

Table 13 is a hypothetical chart compiled by comparing the cut-off scores of ten states and institutions, who use the PPST for admissions and/or certification, with data for all White and Native American first-time PPST test takers between July 1, 1985 and June 30, 1986 (see Appendix G). This chart shows the passing rates of all test takers as if they had taken the test in those ten states.

The data in the preceding tables show that minorities do not fare as well as Whites on teacher competency tests. Although many states appear aware of the impact of their testing policies on minority teaching candidates, current efforts are being directed toward enacting more and/or stricter standards rather than addressing existing problems of equity. Almost without exception, cut scores have been recommended or established, regardless of the examination, at the precise point that eliminates a majority of the Black and Hispanic candidates but permits most White candidates to pass.¹²

Table 13. Hypothetical PPST pass rates of Whites and Native Americans compiled from cumulative frequency distributions between July 1, 1985 and June 30, 1986.

States or Institutions	Pass Rate by Percent					
	Reading		Math		Writing	
	White	Native American	White	Native American	White	Native American
Arizona	79.5	57.1	81.1	59.5	77.8	56.1
Delaware	70.0	48.8	69.1	47.3	87.6	67.2
Kansas	93.3	79.4	92.2	77.0	95.0	80.3
Nevada	91.4	76.7	89.9	72.6	95.0	80.3
New Hampshire	78.4	57.1	73.6	51.7	67.7	43.9
Tennessee	91.4	76.7	89.9	72.6	87.6	67.2
Texas	78.4	57.1	73.6	51.7	67.7	43.9
U. of Cincinnati	89.0	73.5	81.1	59.5	83.3	60.2
U. of New Mexico	82.0	64.5	81.1	59.5	67.7	43.9
West Virginia	82.0	64.5	81.1	59.5	91.3	73.6

Source: Compiled by author with data supplied by Gerald E. Demauro of ETS.

Educators interested in equity for minorities are attempting to determine why minorities score lower than Whites. One reason considered is test bias. Test companies are very much aware of this problem and are attempting to develop test items that are multi-racial or racially neutral. More important to the test takers, however, is the validity study conducted by each state. The state's validity study provides a process for review of the test for bias that is independent of the testing companies' test writers.

Another explanation for lower scores could be the socio-economic status of the students. Because they may come from financially poor

families, they may have become educationally disadvantaged students. A study conducted on White and Black test takers of the Graduate Record Examination (GRE) showed that differences in family income and education level may have implications for the interpretations of the differences in GRE test scores between the two groups.¹³

There appears to be a mismatch between the skills required to be a successful test taker and those readily available in lower socio-economic status students' homes. Magazines such as Time and Newsweek, which afford students the opportunity to practice interpretation of graphic information from a chart or any other graphic information, may have been absent from low-income homes.

Richard Watkins wrote in his report that it has been established that both academic and test performance of majority and minority groups are related to a number of socio-economic factors; family or student income may be the most important of these, but it is not the only important one. Additionally, it is known that there is great variation among schools, districts, and communities in the financial and other resources available, not only for education, but for the general quality of life. These considerations may be particularly important when data about basic skills are being interpreted. The development of such skills is one very important function of schools, but skills development can be enhanced or inhibited by sources external to schools to a much greater extent than is true for other kinds of subject matter preparation in various disciplines.¹⁴

It is important to note that for a sizable proportion of some ethnic minority groups, English is a second language. Such people are

obviously at a disadvantage when being tested on basic skills in English, as required for satisfaction of the skills proficiency requirement. The performance of these ethnic minority groups is influenced to varying degrees by the proportions of the groups for whom English is a second language.

It was discovered that when minority students attend an institution of higher education dominated by a majority culture, they may experience several forms of alienation. These include feelings of social isolation, a lack of an identified peer group, a lack of camaraderie, and a loss of goal orientation, all of which affect the students' academic performance.¹⁵

Peter Garcia says that in close association with socio-economic status and language, cultural barriers are convincing elements associated with population groups experiencing high failure rates on tests.¹⁶

The reports of passing scores from the various states do indicate failure rates for Native Americans in excess of those received by Whites, with Kansas being the one exception. As explained previously, the high scores in Kansas could be related to the fact that Haskell Institute is located in Lawrence, Kansas. When compared to most other minorities, the Native Americans seem to do fine, except in the states of New Mexico and Arizona, where Gallegos considers test bias related to language to be a major problem. However, in Montana the Native Americans are the biggest minority, and when comparing their scores with Whites, they do poorly. If the experiences of other states is an indication of what can be expected in Montana, these test scores should

be monitored. Having looked at testing in other states, attention will now be turned to Montana.

Notes

¹G. Pritchey Smith, "The Critical Issue of Excellence and Equity in Competency Testing," Journal of Teacher Education 35 (March-April 1984): 7.

²Margaret E. Goertz and Barbara Pitcher, The Impact of NTE Use by States on Teacher Selection (Princeton, NJ: Educational Testing Services, 1985), 6.

³Alan G. Zetler, Montana Validation Contractor, Bozeman, Montana, interview with author, 17 October 1986.

⁴Arnold M. Gallegos, "The Negative Consequences of Teacher Competency Testing," Phi Delta Kappan 64 (May 1984): 631.

⁵G. Pritchey Smith, Impact of Competency Tests on Teacher Evaluation: Ethical and Legal Issues in Selecting and Certifying Teachers (ERIC: Syracuse University, Syracuse, New York, ED 154 493, 1984), 13.

⁶Peter A. Garcia, A Study on Teacher Competency Testing and Test Validity with Implications for Minorities and the Results and Implications of the Use of the Pre-Professional Skills Test (PPST) as a Screening Device for Entrance into Teacher Education Programs in Texas (Edinburg, TX: Pan American University, 1985), 19.

⁷Richard W. Watkins, Fourth Year Passing Rates on the California Educational Skills Test (CBEST) and Passing Rates by Institution Attended (California Commission on Teacher Credentialing, September 1986), 3.

⁸Ibid., p. 5.

⁹Ibid.

¹⁰Ibid., p. 9.

¹¹Goertz and Pitcher, op. cit., p. 43.

¹²Smith, Impact of Competency Tests on Teacher Education, op. cit., p. 4.

¹³Martha L. Bell and Catherine V. Morsink, "Quality and Equity in the Preparation of Black Teachers," Journal of Teacher Education 37 (March-April 1986): 16.

¹⁴Watkins, op. cit., p. 13.

¹⁵Bell and Morsink, op. cit., p. 17.

¹⁶Garcia, op. cit., p. 83.

CHAPTER V

TESTING IN MONTANA

How did teacher competency testing become a reality in Montana? The minutes of the Montana Board of Education for the past several years provide a brief sketch of the development of the teacher testing movement in Montana. The first mention of teacher testing is found in a letter to the Board dated June 22, 1983, from Benedict J. Surwill, Dean of the School of Education, Eastern Montana College. He states, "I recommend that the State Board of Public Education study the feasibility of requiring a basic skills competency testing program for all applicants applying for initial certification in Montana" (see Appendix C). While his letter was dated less than two months after the publication of the "Nation at Risk" report, Dean Surwill was not simply joining the rush to mandate quality control measures in education that had immediately followed the report. He had previously been working toward a minimum 2.50 grade point average for teacher certification.

On September 16, 1983, at a Board of Education meeting, Allen Gundersen, board member from Billings, presented two motions. He moved that,

. . . the Board in cooperation with the Board of Regents and the Superintendent of Public Instruction select and develop a basic skills examination to be used as a screening mechanism for entrance into teacher preparation programs.

The motion passed unanimously. He also moved that,

. . . the Board of Public Education, in cooperation with the Board of Regents and other interested parties, consider the testing of applicants for certification of teachers in the area of professional knowledge and subject matter proficiency appropriate to all fields of certification and consider uniform standards to be applied statewide; that the Board start gathering advice and information on the subject as soon as reasonably possible; that the Board investigate the possibility of an internship program for beginning teachers; and that if the Board should decide to implement a test for certification, it begin with the graduating class of 1986, with notice to all entering students in the fall of 1984.¹

Ted Hazelbaker seconded the motion; the motion passed with Tom Thompson voting against. It is interesting to note that Tom Thompson is the Superintendent of Schools at Browning, and is a Native American.

A hearing on proposed rule 10.57211 (to adopt teacher certification testing) was held May 2, 1985. At this hearing six persons submitted comments. Five were proponents, one an opponent. One person stressed that he was a proponent for testing for initial certification only, not for re-certification. In addition, he expressed concern that: (1) the effect of the test is often that faculty end up teaching to the test; (2) standardized tests suffer from a bias, particularly where minorities are concerned; (3) the test does not measure classroom effectiveness; and (4) cutoff scores will be maintained without compromise at times when a supply of teachers is low. The Board acknowledged these concerns and said they would regard them with care.²

The one opponent objected to the test on grounds that the quality of teachers is more likely to be improved by a review of teacher college faculty performance and the teacher's effectiveness in a classroom than by a basic skills test. Following this hearing, the Board of

Education, on June 11, 1985, adopted the final text for precertification testing.

Having made teacher competency testing a reality, ought Montana make score monitoring of Native Americans taking the teacher competency test a necessity? Research in other states, as already seen, points out that socio-economic status, language, culture, alienation, and loneliness can all be explanations for low scores on competency tests. If this is indeed true, the profile of the Native American in Montana fits the profile of the minorities in other states who score below adopted passing cut scores.

A look at the 1980 census chart, entitled American Indian Social and Economic Characteristics, Montana, shows us that the family profile depicts high numbers of families with females as the head of the household. This normally translates to a lower income level. We also find that the percent of persons five years of age and over who speak a language other than English at home ranges to highs of 77.9 percent in Big Horn County and 77 percent right on the Crow reservation (see Appendix D).

A look at Appendix E, which is a sample data chart, entitled Social Characteristics for American Indian Persons on Reservations: 1980, shows us that while the percentage of those who have completed four years or more of college is high in Yellowstone County, it is low in other counties. Reading the Montana daily newspapers also gives a picture of the socio-economic status of the Montana Native Americans. Federal Director of Indian Education, Henrietta Whiteman, was quoted as saying, "Poverty, poor home lives and problems with identity and self

image can make learning both difficult and unimportant to many Indian children."³ Whiteman is on a two-year leave of absence as Director of the University of Montana's Native American Studies Program to head the Bureau of Indian Affairs' Indian education efforts.

"Reservations' Indians in Poor Economic Shape," headlines an article found in the December 11, 1986, Helena Independent Record. The article goes on to tell us that according to the Interior Department, economic conditions on American Indian reservations are bad and are worsening with no immediate help in sight. A department study found that 41 percent of the American Indians living on reservations were below the poverty level, as against 12 percent of the total United States population. It also found that a large percentage of Indians living near reservations were also in much worse economic shape than the national average.⁴

The Native American's problem with self-image and identity is often brought out in newspaper interviews and news articles. In an article on the Two Eagle River School, Dixon, Montana, the Missoulian describes this school as an alternative high school which marks a dramatic change from reservation schools of the past, where "white teachers punished children for speaking Indian languages and forced them to give up Indian ways." The students at this school are from all over the Flathead reservation. Sophomore Rhonda Quequesah feels the 90-minute bus ride from Ronan is easier to endure than the prejudice she felt at public school. She is quoted as saying, "There are no people here to put you down because you're Indian." A parent who works in the school's kitchen, Charlene Swimmer, is also quoted as saying, "I

took my son out of public school two weeks ago because he was told by his teacher, 'You'll never be anything but a drunk on the street.'" She also said, "Down here they don't hear that."⁵

A speech given to a Great Falls YWCA audience by Mary Hoyt, who works at KFBB television, on growing up as a Native American in Montana, was reviewed in the March 3, 1987, Great Falls Tribune. "There was so much anger and hostility," she said. "It was really frightening at times. And Ugly." She told how there were many Native American students who rode the bus to Havre from the Rocky Boy reservation. "Almost every day I can remember a fight while we waited for the bus between Indians and whites, boys and girls," she said. "These fights were usually preceded by name calling in reference to someone's race. It was very tense." Ms. Hoyt continues to experience racism in Great Falls. Derogatory comments and jokes about Indians are heard at work.⁶

On February 26, 1987, the Great Falls Tribune interviewed Dale Old Horn, a graduate of Massachusetts Institute of Technology, who is head of the Department of Indian Studies and Social Sciences at Crow Agency's Little Big Horn College. Old Horn is hoping that new tribal economic development plans will bring better economic times to the reservation, where he says at least two of every three workers are unemployed. The Bureau of Indian Affairs has estimated the unemployment rate at 66 percent, but tribal leader Richard Real Bird estimates it at 85 percent. Old Horn says, "My native culture is deep within me. When we're living off the reservation, most of us feel lost and all alone. Our sense of well-being and of esteem suffers."⁷

Lee Clark, Principal of Browning High School, expressed his concerns to the State Board of Regents when the Board of Regents was proposing the establishment of admission standards at some or all of the six schools of the university system. It was Lee Clark's belief that admission standards, especially tied to ACT scores, would discriminate against Native American students. Even though Browning has established a college preparatory sequence, the average ACT score for Browning students is still near 14, compared with the average ACT score of 19 for Montana high school students.⁸

An article in the Great Falls Tribune on October 2, 1986, reveals that Eastern Montana College has taken a step to provide role models for Indian women. A \$38,000 grant from the Women's Education Equity Program of the United States Department of Education will fund "Indian Women of the 90's and Beyond." This program is designed to develop the leadership abilities and increase the aspirations of Indian women in college and high school. The program will bring 15 Indian girls from area high schools and 15 Indian women from area colleges together with well educated Indian women who are successful in professions and leaders in their communities. "The object is to provide role models so that the 30 young women know they can make the next step," said Deborah LaCounte, Director of Indian Career Services at Eastern Montana College.⁹

Having looked at the profile of the Native American in Montana, can we surmise that they, too, might experience failure rates on competency tests in excess of Whites? What have been the results of the first test administration in Montana? A report from the Montana

Office of Public Instruction, entitled "Testing, October 1985-November 1986," and dated January 19, 1987, gives the following results of Montana's teacher competency testing. Test scores have been submitted from 613 people. Of this total, 44 (7%) have failed at least one portion of the Core Battery. Montana does not collect data by ethnicity, so there is no record of how many of the 44 who failed the test were minority group members. The seven percent who failed to be certified is a small percentage, but if a disproportionate share of that percentage were Native Americans, a problem could exist. This report did point out that the Office of Public Instruction is currently collecting information for the Board of Public Education to determine some data on the test such as where applicants received their general education and professional education. It was felt that this procedure should allow a truer picture of what training colleges and states are responsible for rather than the assumption that a college where a person takes the test is totally responsible for all three portions of the Core Battery.

Given the importance placed on testing for certification, and also the possible proven adverse impact on minorities -- especially the Native Americans -- what could be done? The following chapter looks at some of the attempts made by a few other states.

Notes

¹Board of Public Education, Montana, Meeting Minutes, 16 September 1983.

²Ibid., 2 May 1985.

³Missoulian [Montana], 5 April 1986.

⁴Independent Record [Helena, Montana], 11 December 1986.

⁵Missoulian [Montana], 26 October 1986.

⁶Great Falls Tribune [Montana], 3 March 1987.

⁷Ibid., 26 February 1987.

⁸Ibid., 7 November 1986.

⁹Ibid., 2 October 1986.

CHAPTER VI

REMEDIATION PROGRAMS IN USE IN OTHER STATES

What can be done to help Native Americans who have failed to pass the teacher competency test? Other states have tried several different programs to help minority youth meet the challenge of teacher competency testing and to attract them to the field of education.

One of the programs used by many states is described as "testwiseness." ETS has developed a program in testwiseness. In the ETS program, students may receive assistance from members of the institution's staff who are not involved in the administration of tests. They receive a long-term structured program of test preparation based on the student's own strengths and weaknesses.¹

Another type of testwiseness involves the use of developmental strategies based on observations about the types of difficulties students frequently exhibit in taking tests. Difficulties most often cited by students include test anxiety and difficulty in pacing. Some students may spend up to two minutes per item trying to figure out the correct response, while research has indicated it is essential that items be completed in 15 seconds. Another difficulty frequently cited is that many students are able to respond correctly to items at the knowledge level, but may be unaccustomed to questions that require application of knowledge. And, because many test items require interpretation of data presented in visual format, students who have

not read widely in current events magazines may lack experience in responding to this type of item.²

Kentucky found it necessary to institute a program to help not only minority youth, but also students from rural populations who were also failing the teacher competency test at a higher rate than White urban students. The State Superintendent of Kentucky decided to focus attention on the possibility that the ability to take standardized tests, rather than the ability to acquire knowledge, leads to the differentiation in test scores. If skill in handling testing situations, rather than the amount of accumulated knowledge, contributes significantly to differential test scores, then the solution is to ensure that all students have equal access to training in whatever skills they need in order to show their true level of knowledge on standardized tests.³

At the direction of State Superintendent Alice MacDonald and with the cooperation of an advisory committee of faculty and school administrators, the Department of Education in Kentucky implemented a program to encourage institutions to take action to meet the needs of minority and rural students who were underprepared for the NTE.

The training content maintained that minority and rural students can be trained to perform equally well on standardized tests, not by teaching to the tests, but rather by remedying acknowledged deficits in their prior schooling. The test-taking skills lacked by minority and rural students are reading comprehension and study skills.⁴ Efficient and effective training programs in these skill areas, along with practice in working with the format of standardized tests and the

testing vocabulary, form the substance of the training needed by under-prepared students.

Students need to practice reading comprehension and study skills in every one of their general education courses, which means all faculty, not just education faculty, must recognize deficiencies and provide support. This support consists of administrative recognition of the shared responsibility for teacher preparation.

The University of Arkansas at Pine Bluff (UAPB), which is predominantly a Black institution, also realized that experience in taking tests can raise students' test scores. According to a study by Rachel Greer in 1983, 42 percent of the students at UAPB passed the NTE. In 1985, 67 percent of the students did well enough to be certified to teach in Arkansas.⁵

The Division of Education at UAPB requires students to enroll in a testing seminar class. The class is designed to teach students how to take standardized tests. UAPB has also established the Advocacy Center for Equity and Excellence in Teacher Education. Its purpose is to alleviate the current and future shortages of Black teachers.

Because of the dismal record of minority teacher candidates on Louisiana's required certification examination, Grambling State University -- another predominantly Black institution -- put into place several different strategies to raise passing scores from 5 percent on the NTE to 85 percent.⁶ Among the programs that proved successful were: diagnostic-testing and remediation programs; testwiseness seminars designed to teach test-taking skills; an aggressive recruitment campaign to attract academically capable students; and

tightened college entrance requirements. Before entering teacher training, for example, sophomores must take the NTE Core Battery. The college has made a commitment to accept the responsibility to make sure that the students they graduate will pass the test and be eligible for certification.

Numerous universities and colleges have instituted various mentorship programs in which minority students may spend a specified time, usually during the summer, on campus studying with a professor who shares a common research interest. Faculty members provide leadership and direction in a research project within the discipline.⁷

It is important to have early recruitment and intensive training of minority and low income students who wish to teach.⁸ As early as high school, students who have expressed an interest in teaching as a career could be selected to participate in a special university pre-professional teacher preparation program.

The program would consist of a five-year course leading to a bachelor's degree. Admission standards would include measures of potential for growth and a strong willingness to learn. Upon entry into the program, diagnostic tests would be given to the students. In conjunction with their regular course load, the students would be enrolled in a series of self-paced tutorials to work on basic skills in those areas where their diagnostic tests indicated attention was needed. At the end of two years, the students would take a series of tests to measure their growth. A new set of self-paced tutorials, based upon their current skill levels, would be developed and the

process would be repeated on a higher level. The students would also take practice versions of the required teacher examinations.

Greer says that many students perform poorly on the NTE because the examination is as much a reading test as a subject matter test and these students have not mastered the basics of reading before entering college.⁹

A number of teacher education programs are promising "quality assurance" or "warranty assurance" programs. This is a pledge by teacher training institutions that they will stand by their graduates. Should the graduates of a teacher education program fail to perform satisfactorily as beginning teachers, the institution that trained them promises to provide direct assistance and support to both the employing schools and the new teachers. The idea focuses on quality and accountability. Oregon State University, Oregon State College, University of Arkansas at Pine Bluff, University of Virginia, Northern Colorado University, Montana State University, and Eastern Washington State College are the institutions that are currently offering such a program.

Other states have discovered the need for intervention designed to solve the problem of high minority failure rates on teacher competency tests. One can see that most of these solutions require collaboration on the part of the entire educational community within a state. Possibly a good outcome of the low minority test scores could be the emphasis that is now being put on building stronger educational programs for this segment of society. While most of the programs are quite new, and success rates have not yet been evaluated, at least two

of the programs, at the University of Arkansas at Pine Bluff and Grambling State University, are claiming great success.

Since Montana has had the testing program in effect less than a year, it is not yet determined whether or not there will be a need for remediation. If there is a need, the experiences of other states could be useful. The final chapter of this paper will summarize findings, draw conclusions, and make recommendations on the basis of the material presented in this research.

Notes

¹Martha L. Bell and Catherine V. Morsink, "Quality and Equity in the Preparation of Black Teachers," Journal of Teacher Education 37 (March-April 1986): 16.

²Ibid., p. 19.

³Elizabeth Nelli and Bernard Minnis, "Minorities and Testing Mandates: A State Intervenes," Action in Teacher Education 8 (Spring 1986): 40

⁴Ibid., p. 41.

⁵Rachel D. Greer, "Revitalizing Education Programs to Meet the Challenge of Equity and Excellence for Minorities in Teacher Education," Action in Teacher Education 8 (Spring 1986): 29.

⁶Blake Rodman, "At Grambling: 'Fighting the Scores Instead of the Tests,'" Education Week, 20 November 1985: 13.

⁷Bell and Morsink, op. cit., p. 19.

⁸Bernard R. Gifford, Excellence and Equity in Teacher Competency Testing: A Policy Perspective (ERIC: Syracuse University, Syracuse, New York, ED 270 494, 1986), 18.

⁹Greer, op. cit., p. 18.

CHAPTER VII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

State governmental agencies and state legislatures have spoken; forty-nine states have adopted or are planning to adopt some sort of teacher competency testing program. While administrators in state education departments have generally advocated the use of teacher examinations, they are concerned that cutoff scores do not reflect standards of excellence. Instead, passing scores may simply represent minimal levels of proficiency that are politically acceptable and do not threaten the supply of teachers. The public desires reassurances on educational effectiveness, and competency testing appears to be one way of providing assurance to this increasingly wary public.

Having adopted the testing program, the states have taken on legal and ethical issues that must be addressed. The legal issues, which seem to permeate the cases dealing with teacher competency testing, are constitutional and statutory. Another issue that is not only ethical but also socio-economic is that data do show that the minorities do not fare as well on the certification tests as the Whites. This is a major issue and states implementing testing programs will have to deal with it even though valid competency testing does hold up in court.

In other states, state superintendents and colleges of education are instituting programs to break the cycle of minority failure on teacher tests. Among the programs being used are testwiseness courses,

testing seminar classes, diagnostic testing and remediation programs, aggressive recruitment of capable minority youths, mentor and role model programs, and warranty assurance programs.

Socio-economic status, language, and cultural barriers have been determined to play a role in the low scores minorities receive on standardized tests. A look at the social characteristics profile of Montana's Native Americans implies that they, too, might experience low scores on standardized tests. Data compiled from other states show that with one exception, Kansas, Native Americans are experiencing high failure rates on competency tests. Why Native Americans scored high in Kansas could be related to the fact that a well-known Indian school, Haskell Institute, is located in Kansas. Not only the students who have attended this school, but also the children of Native American teachers at the school, may contribute to the high test scores.

Since Native Americans in other states are not scoring well on these tests, Montana needs to monitor this. The disparity between the numbers of Native Americans in the teaching profession (1.7 percent) and Whites in Montana could become an even more serious problem than it is already, should the experience of other states repeat in Montana.

Not all states using teacher competency tests collect data on minority pass/fail rates. Montana so far is not collecting this data. This kind of data is needed in order to make remediation possible.

Before listing the recommendations, it is important to note that socio-economic conditions beyond the control of state education policy makers might affect the test scores of Native Americans in Montana. The recommendations from this study are as follows:

- (1) Complete data collection on pass/fail rates should be required.
- (2) Native American language and cultural knowledge should be considered a talent that is not measured on the competency tests. Negotiating for extra points for this knowledge could be considered for those who barely missed passing the competency tests. At one time the Montana Board of Education adopted a requirement that all teachers in Montana should have a course in Native American Culture. This requirement is no longer in effect, but receiving extra points for this information might be an incentive for non-Indian teachers in Montana to take these courses, which are taught in Montana's University System.
- (3) Remediation or testwiseness programs for those prospective teachers who fail the competency test should be established.
- (4) Recruitment of capable Native Americans into the teaching profession should be instituted.
- (5) Consideration should be given to developing alternate entry and certification routes for Native Americans raised in homes where language other than English is spoken.

Teacher competency testing appears to be here to stay, but that should not mean the State can sacrifice equity for presumed quality.

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APPENDICES

APPENDIX A

SANDEFUR'S ASSESSMENT OF STATES

Table 14. States mandating competency assessment of teachers---1986.

STATE	MANDATE		DATE	LEVEL		SKILLS TESTED				TYPE OF TESTS	
	Legislative	St. Bd. of Educ.		Admissions	Certification	Basic	Professional	Academic	On-the-Job	National Std.	Customized
Alabama		X	80/81	X	X	X	X	X		ACT/SAT	X
Arizona	X	X	80/81	X	X	X	X			PPST	X
Arkansas	X	X	79/83		X	X	X	X		NTE	X
California	X		81/83	X	X	X		X		CBEST/NTE	X
Colorado	X		81/83	X	X	X				CAT	
Connecticut	X	X	82-85/83-87	X	X	X	X	X			X
Delaware		X	82/83		X	X				PPST	
Florida	X		78/80	X	X	X	X		X		X
Georgia		X	75/76		X		X	X	X		X
Hawaii		X	84/86		X	X	X	X		NTE	
Illinois	X		85/86-88	X	X	X					X
Indiana	X		84/85	X	X	X	X	X		NTE	X
Kansas	X		84/86		X	X	X			PPST/NTE	
Kentucky	X	X	82/83-85	X	X	X	X	X	X	NTE	
Louisiana	X		77/78		X	X	X	X		NTE	
Maine	X		84/88		X	X	X	X		NTE	
Maryland		X	86/87		X	X	X	X		NTE	
Massachusetts		X	79/82		X	X	X	X			X
Minnesota	X		85/88			X		X		PPST	
Mississippi	X	X	82/86	X	X	X	X	X	X	NTE	X
Missouri		X	81/85	X		X				ACT/SAT	
Montana		X	85/86		X	X	X	X		NTE	
Nebraska	X		84/86	X		X				PPST	
Nevada		X	84/86	X	X	X		X	X		
New Hampshire		X	84/85		X	X				PPST	
New Jersey		X	84/85		X	X		X		NTE	
New Mexico	X	X	81/83	X	X	X	X	X		NTE	
New York		X	84/84		X	X	X		X	NTE	
North Carolina		X	79/82	X	X	X	X	X	X	NTE	
North Dakota		X	86/	X	X	X	X	X			
Ohio		X	85/87	X	X	X	X	X			
Oklahoma	X		80/82		X	X	X	X	X		X
Oregon		X	82/85	X	X	X				CAT	
Pennsylvania		X	84/87		X	X	X	X	X		X
Rhode Island		X	82/86		X	X	X			NTE	
South Carolina	X		79/83	X	X	X	X	X	X	NTE	
South Dakota		X	85/86		X	X	X	X	X	NTE	
Tennessee		X	79/79	X	X	X	X	X		PPST/NTE	
Texas	X		81/84-86	X	X	X	X	X	X	PPST	X
Utah		X	79/80	X		X					
Vermont		X	80/82		X		X	X	X		X
Virginia	X		80/85		X	X	X	X	X	NTE	X
Washington		X	78/83-87	X	X	X	X				X
West Virginia		X	82/85		X	X	X	X		PPST	
Wisconsin		X	86/87	X	X	X		X			
Wyoming		X	82/82	X		X					
TOTALS - 46	20	32		25	41	44	32	31	14	31	16

SOURCE: J. T. Sandefur, "State Assessment Trends," AACTE Briefs 7 (August 1986): 13.

APPENDIX B

SUMMARY OF PERSONNEL JOB ASSIGNMENT IN MONTANA

Table 15. Summary of personnel job assignment for FY 1986, State of Montana.

Job Type	Job Description	Summary Totals by Race/Sex										Summary Totals by Sex	
		American-Indian		Asian		Black		Hispanic		White		Male	Female
		(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)		
0	Teachers	38	123	8	8	4	4	10	11	3,874	6,173	3,934	6,319
1	Aides	2	29	0	0	0	0	0	1	33	883	35	913
2	Specialized Personnel	5	16	2	2	0	0	1	1	409	701	417	720
3	Administrators	17	10	1	0	0	0	1	0	672	241	691	251
	Grand Total*	60	174	10	10	4	4	11	13	4,742	7,761	4,827	7,962
													12,789

*Personnel may be included in multiple categories; however, any person is counted only once per total line.

SOURCE: Office of Public Instruction, Helena, Montana.

APPENDIX C

LETTER FROM BENEDICT J. SURWILL



RECEIVED
JUN 26 1983
BOARD OF
PUBLIC EDUCATION

DEAN OF EDUCATION
(406) 657-2285

Mr. Hidde Van Duym, Executive Secretary
Board of Public Education
State of Montana
33 South Last Chance Gulch
Helena, MT 59620

June 22, 1983

Dear Mr. Van Duym:

I was disappointed when I learned that the State Board of Public Education did not approve my proposal to require a minimum overall 2.50 gpa for teacher certification. Thank you for the time you devoted to considering my proposal. However, I am still concerned about the quality control measures mandated by the State Board of Public Education for all certificated school personnel in Montana. Therefore, at this time I present the State Board of Education with the following recommendation.

I recommend that the State Board of Public Education study the feasibility of requiring a basic skills competency testing program for all applicants applying for initial certification in Montana. The basic skills competency testing program to which I am referring, would be similar to that used by the State of Colorado (see attachment). All applicants for initial certification would be required to demonstrate competency in written and oral English and mathematics prior to the issuance of a certificate. This includes all teachers, administrators, and special services school personnel whose positions require certification.

I recommend the use of the California Achievement Test (CAT), Level 19, or an equivalent test be used to determine competency in spelling, English mechanics and usage, and mathematics computation and concepts. Oral English is not a part of the CAT. A separate testing procedure would have to be arranged to test this area of competency. Scores at or above the 75th percentile should be required to pass all sections of the written examination.

Testing Centers could be designated at all institutions of higher education in the State of Montana. The cost for taking the test would be paid by the applicant.

I feel certain that the Deans of Education from the units of the Montana University System would lend their assistance to the Office of Public Instruction and the State Board in carrying out the feasibility study. The study should be initiated immediately and the Board should receive the full report by February 1, 1984. The Board should review and implement the plan, if acceptable, by September 1, 1984.

Sincerely,

Benedict J. Surwill
Dean, School of Education

APPENDIX D

AMERICAN INDIAN SOCIAL AND ECONOMIC
CHARACTERISTICS, MONTANA

Table 16. American Indian social and economic characteristics, Montana.

	American Indian										
	Families			Persons per Household	Persons 5 Yrs. & Over % Who Speak Language Other than Eng. at Home		Civilians 16-19 Yrs. % Not Enrolled in School, Not H.S. Grads.		Families % w/Own Children Under 6 Yrs.	Persons Under 18 % Living w/ 2 Parents	Children Ever Born per 1000 Women 35-44 Yrs.
	Married Couple	Householder No Husband Present	Female		Yrs. & Over % Who Speak Language Other than Eng. at Home	Enrolled in School, Not H.S. Grads.	Families % w/Own Children Under 6 Yrs.	Persons Under 18 % Living w/ 2 Parents			
Montana Reservation											
Blackfeet Reservation	777	249		3.99	13.6	26.9			33.2	63.5	4,280
Glacier County (pt.)	700	231		3.89	11.8	29.6			33.4	61.0	4,030
Pondera County (pt.)	77	18		5.07	28.7	8.6			30.5	81.6	5,556
Crow Reservation	540	167		4.95	77.0	17.5			33.1	63.3	4,229
Big Horn County (pt.)	521	164		4.96	77.9	18.3			34.0	62.5	4,159
Yellowstone County (pt.)	19	3		4.74	43.2	--			--	92.5	5,000
Flathead Reservation	573	209		3.50	17.8	12.1			30.7	51.9	4,306
Flathead County (pt.)	...	...		...	--	--			--	--	--
Lake County (pt.)	457	185		3.50	18.4	12.7			32.2	50.4	4,376
Missoula County (pt.)	45	13		4.03	14.9	--			8.5	60.9	3,909
Sanders County (pt.)	69	11		3.18	--	--			47.8	100.0	--
Belknap Reservation	235	112		4.32	4.8	37.7			30.3	59.3	5,429
Blaine County (pt.)	205	107		4.38	4.4	37.7			32.5	59.0	5,820
Phillips County (pt.)	30	--		3.73	12.9	--			--	68.0	--
Ft. Peck Reservation	518	251		4.06	17.8	49.8			36.3	53.6	4,860
Daniels County (pt.)	--	--		--	--	--			--	--	--
Roosevelt County (pt.)	457	231		3.98	17.6	55.5			36.8	52.8	4,566
Sheridan County (pt.)	--	--		--	--	--			--	--	--
Valley County (pt.)	61	20		4.71	19.7	14.0			32.0	58.5	6,469
Northern Cheyenne Reservation	406	172		4.25	44.3	20.0			43.1	53.4	4,500
Big Horn County (pt.)	121	41		4.39	36.5	12.1			40.9	78.6	3,267
Rosebud County (pt.)	285	131		4.20	46.9	22.2			43.9	45.5	5,039
Rocky Boy's Reservation	207	73		4.98	53.4	26.1			44.1	74.3	5,452
Chouteau County (pt.)	21	3		4.23	--	34.8			30.8	88.9	3,545
Hill County (pt.)	186	70		5.06	59.4	24.8			45.7	73.0	5,790

Table 16---continued.

	American Indian									
	Families		Persons 5 Yrs. & Over		Civilians 16-19 Yrs.		Families % w/Own Children		Children Ever Born per 1000 Women 35-44 Yrs.	
	Married Couple	Female Householder No Husband Present	Persons per Household	% Who Speak Language Other than Eng. at Home	% Not Enrolled in School, Not H.S. Grads.	Under 6 Yrs.	Persons Under 18 % Living w/ 2 Parents	Under 6 Yrs.	Under 6 Yrs.	Under 6 Yrs.
Montana Reservation	...	...	...	...	...	...	...	...	...	
Other reservation lands in MT*	...	...	...	...	...	...	...	...	...	
Big Horn County (pt.)	...	...	...	...	...	...	...	...	...	

*Includes land in Big Horn County identified as belonging to both the Crow and Northern Cheyenne Reservations.

Dashes (--) represent zero or a percent which rounds to less than 0.1.

Dots (...) mean not applicable, or that the data are being withheld to avoid disclosure of information for individuals.

SOURCE: U.S. Bureau of the Census, 1980 Census, General Population Characteristics, Montana, Table 55; and General Social and Economic Characteristics, Montana, Table 192.

APPENDIX E

SOCIAL CHARACTERISTICS FOR AMERICAN INDIAN
PERSONS ON RESERVATIONS--1980

Table 17. Social characteristics for American Indian persons on reservations--1980.

Total Persons	Number	Persons Total	Age			Persons 5 Years and Over -- % Who Speak a Lang.	Civilian Persons 16 to 19 Yrs. -- % Not Enrolled in School, Other Than English School at Home	Persons 25 Years Old and Over % Completed 4 or More Years of College	Families -- % with Own Children Under 6 Years	Persons 18 -- % Under Living with 2 Parents	Children Ever Born per 1000 Women 35 to 44 Years			
			% of Total Persons	Under 5 Years	18 Yrs. and Over							65 Yrs. and Over		
													Median	
Montana Reservation														
Blackfeet Reservation	6664	5084	76.3	693	2885	377	21.1	13.6	26.9	57.2	5.3	33.2	63.5	4280
Glacier County (pt)	6004	4535	75.5	618	2602	328	21.4	11.8	29.6	61.0	5.4	33.4	61.0	4030
Pondera County (pt)	660	549	83.2	75	283	49	18.5	28.7	8.6	21.0	4.3	30.5	81.6	5556
Crow Reservation	5920	4083	69.0	586	2251	194	20.1	77.0	17.5	53.2	7.0	33.1	63.3	4229
Big Horn County (pt)	5631	3982	70.7	580	2203	194	20.2	77.9	18.3	52.4	6.5	34.0	62.5	4159
Yellowstone County (pt)	289	101	34.9	6	48	--	17.5	43.2	--	89.5	26.3	--	92.5	5000
Flathead Reservation	19551	3504	17.9	381	2002	184	20.6	17.8	12.1	58.1	1.3	30.7	51.9	4306
Flathead County (pt)	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lake County (pt)	17075	3143	18.4	343	1805	169	20.6	18.4	12.7	58.8	1.4	32.2	50.4	4376
Missoula County (pt)	642	314	48.9	25	163	13	20.2	14.9	--	56.3	--	8.5	60.9	3909
Sanders County (pt)	1834	47	2.6	13	34	2	23.5	--	--	7.7	--	47.8	100.0	--
Fort Belknap Reservation	1945	1711	88.0	206	949	87	20.0	4.8	37.7	53.2	6.3	30.3	59.3	5429
Blaine County (pt)	1825	1641	89.9	206	904	87	19.8	4.4	37.7	54.6	6.8	32.5	59.0	5820
Phillips County (pt)	120	70	58.3	--	45	--	36.1	12.9	--	33.3	--	--	68.0	--
Fort Peck Reservation	9839	4422	44.9	618	2422	226	19.9	17.8	49.8	56.6	3.2	36.3	53.6	4860
Daniels County (pt)	118	--	--	--	--	--	--	--	--	--	--	--	--	--
Roosevelt County (pt)	8208	3827	46.6	536	2111	189	20.2	17.6	55.5	55.9	3.0	36.8	52.8	4566
Sheridan County (pt)	174	--	--	--	--	--	--	--	--	--	--	--	--	--
Valley County (pt)	1339	595	41.4	82	311	37	19.2	19.7	14.0	62.2	4.5	32.0	58.5	6469
North Cheyenne Reservation	3612	3010	83.3	444	1492	85	17.8	44.3	20.0	54.6	2.7	43.1	53.4	4500
Big Horn County (pt)	900	730	81.1	102	366	7	18.2	36.5	12.1	74.1	2.1	40.9	78.6	3267
Rosebud County (pt)	2712	2280	84.1	342	1126	78	17.7	46.9	22.2	47.7	3.0	43.9	45.5	5039

Table 17--continued.

	Total Persons	Number Persons	Age			Persons 5 Years and Over -- % Who Speak a Lang.	Civilian Persons 16 to 19 Yrs. -- % Not Enrolled in School, not High School Graduates	Persons 25 Years Old and Over -- % Completed 4 or More H.S. Years of College	Families with Own Children Under 6 Years	Persons Under 18 -- % Living with 2 Parents	Children: Ever Born per 1000 Women 35 to 44 Years					
			% of Total	Persons	Years							18 Yrs. and Over	65 Yrs. and Over			
														Under 5 Years	5 Yrs. and Over	18 Yrs. and Over
Montana Reservation																
Rocky Boy's Reservation	1486	1445	97.2	196	690	41	17.4	33.3	44.1	74.3	5452					
Chouteau County (pt)	136	136	100.0	10	73	--	19.6	66.7	--	88.9	3543					
Hill County (pt)	1350	1309	97.0	186	617	41	17.3	29.0	45.7	73.0	5790					
Other reservation lands	--	--	--	--	--	--	--	--	--	--	--					
Big Horn County (pt)	--	--	--	--	--	--	--	--	--	--	--					

Data are estimates based on a sample.

SOURCE: U.S. Bureau of the Census, 1980 Census, General Population Characteristics, Montana, Table 55; and General Social and Economic Characteristics, Montana, Table 192.

APPENDIX F

COVER LETTER AND SURVEY QUESTIONNAIRE

919 Mauldin
Helena, MT 59601

January 30, 1987

Mr. R. Berkley Lunt, Director
Teacher Certification Unit
Department of Education
1535 West Jefferson
Phoenix, Arizona 85007

Dear Mr. Lunt:

I am a high school librarian at Capital High School in Helena, Montana, and am currently working on my Professional paper which is the final requirement pursuant to my receiving a Master's degree in Public Administration from Montana State University.

During the course of study leading to an MPA, I served as an intern at the Office of Public Instruction working under Dr. John Voorhees, Director of Teacher Certification for the State of Montana. One of my projects was to do research on teacher competency testing in other states. I became aware of the higher percentage rates of Whites passing teacher competency tests in comparison to the percentage rates of Blacks and Chicanos passing the same tests.

As of July 1, 1986, Montana instituted the requirement that prospective teachers must score above a state-mandated cut score on the National Teacher Exam in order to receive a teaching certificate. In Montana our largest minority group is the Native American. I'm wondering if we too will have to face the problem of a higher percentage of our minority not meeting state certification standards (i.e., failing to pass the NTE) than White candidates.

I am writing to states that have in place state-mandated testing of prospective teachers. I have selected states that I felt would have either had some Native Americans take the test and/or would have had the testing in place long enough to have acquired some data on passing rates. What I want to obtain is data showing the passing rates of Native Americans as compared to Whites and other ethnic groups. I would also like to know whether any states have instituted any programs in the areas of special testing of minority groups, tutoring of minority students prior to testing or following testing (if the student failed), and special recruiting of top students from minority groups into the teaching profession.

It is my plan to show in my professional paper that what has happened to minority students in other states could be a predictable outcome in

Mr. R. Berkley Lunt
January 30, 1987
Page Two

Montana. If an equity gap does indeed exist, I would like to describe the remedies and solutions that have been tried in other states to diminish this gap and to investigate the feasibility of these solutions for our state.

Will you please answer the following questionnaire and return it to me in the self-addressed envelope, which I am enclosing? I'm hoping to either obtain data from you or information on where to obtain data to use in my professional paper. I am writing this paper with the full support and assistance of Dr. John Voorhees, Department of Certification, OPI, State of Montana; and Dr. Krishna Tummala, Director of MPA Program, Department of Political Science, Montana State University. They may be contacted to confirm my intended use of the data I have requested.

Thank you.

Sincerely,

Margaret A. Crennen

Enclosure: Questionnaire

SURVEY QUESTIONNAIRE

STATE: _____

TEST USED: _____

PURPOSE OF TEST: _____

Is the above information correct?

What is the cut score used for this test?

Can you send me data that will show the percentage of Native Americans, Whites, and other ethnic groups receiving passing scores on this test?

If NO, please answer the following:

Do you intend to monitor these scores in the future?

Does another department gather this data?

If YES, please give me the name and address of the department.

Do you know of any colleges or universities in your state with teacher-recruiting programs, that are actively recruiting top students from minority groups?

If YES, can you send information on these programs? OR Will you please list names and addresses of persons I can contact for information?

Do you know of any colleges or universities in your state with programs that actively tutor minority students before testing of those who plan to be teachers or who do remedial tutoring of students who have failed the test?

If YES, can you send information on these programs? OR Will you please list names and addresses of persons I can contact for information?

(Survey Questionnaire, cont'd.)

Do you know of any colleges or universities that have instituted special testing of minority students who are studying to become teachers as a type of "early warning system" and then followed up with a special course of study to alleviate later possibilities of failure on teacher competency tests?

If YES, can you send me information on these programs? OR Will you please list names and addresses of persons I can contact for information?

If you are not in a position to give me information on any of these questions, I would appreciate any names and addresses that you could supply for me to contact to obtain the type of information I am seeking.

Thank you. I appreciate your assistance in my professional paper endeavor.

Margaret A. Crennen

APPENDIX G

PPST CUT SCORES AND FREQUENCY

DISTRIBUTION TABLES

Table 18. PPST cut scores.

<u>Del.</u>	R	175				<u>NH</u>	R	173		
	M	175					M	174		
	W	172					W	175		
TEA (TX)	R	172	86	88		<u>NV</u>	R	169	fall of	
	M	171	173	175			M	169	'86	
	W	173	174	176			W	170		
<u>Univ of Cinn</u>	R	170				<u>KS</u>	R =	168	PK (642)	
	M	172					M =	168		
	W	173					W =	170		
<u>TN</u>	R	169				<u>W.VA</u>	R =	172		
	M	169					M =	172		
	W	172					W =	171		
<u>CAEOS (Ohio School Districts)</u>	R	180 - 1SEM				Univ. of N. Mex.	R	172		
	M	180 - 1SEM					M	172		
	W	177 - 1SEM					W	175		
<u>Arizona</u>	R	173								
	M	172								
	W	174								

SOURCE: Educational Testing Service, Princeton, New Jersey (August 1986).

Table 19. PPST cumulative reading score frequency distributions for Native American, Eskimo and Aleut test takers, 1985-86.

READING	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
	29			
152	1	1	0.348	0.348
157	2	3	0.697	1.045
158	4	7	1.394	2.439
159	4	11	1.394	3.833
160	4	15	1.394	5.226
161	5	20	1.742	6.969
162	1	21	0.348	7.317
163	8	29	2.787	10.105
164	5	34	1.742	11.847
165	10	44	3.484	15.331
166	9	53	3.136	18.467
167	6	59	2.091	20.557
168	8	67	2.787	23.345
169	9	76	3.136	26.481
170	16	92	5.575	32.056
171	10	102	3.484	35.540
172	21	123	7.317	42.857
173	12	135	4.181	47.038
174	12	147	4.181	51.220
175	17	164	5.923	57.143
176	19	183	6.620	63.763
177	21	204	7.317	71.080
178	17	221	5.923	77.003
179	9	230	3.136	80.139
180	10	240	3.484	83.624
181	10	250	3.484	87.108
182	12	262	4.181	91.289
183	10	272	3.484	94.774
184	5	277	1.742	96.516
185	3	280	1.045	97.561
186	3	283	1.045	98.606
187	1	284	0.348	98.955
188	2	286	0.697	99.652
189	1	287	0.348	100.000

SOURCE: Educational Testing Service, Princeton, New Jersey (July 1986).

Table 20. PPST cumulative math score frequency distributions for Native American, Eskimo and Aleut test takers, 1985-86.

MATH	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
	20	.		
155	1	1	0.338	0.338
156	2	3	0.676	1.014
157	2	5	0.676	1.689
158	4	9	1.351	3.041
159	3	12	1.014	4.054
160	4	16	1.351	5.405
161	10	26	3.378	8.784
162	6	32	2.027	10.811
163	5	37	1.689	12.500
164	7	44	2.365	14.865
165	6	50	2.027	16.892
166	7	57	2.365	19.257
167	11	68	3.716	22.973
168	13	81	4.392	27.365
169	10	91	3.378	30.743
170	16	107	5.405	36.149
171	13	120	4.392	40.541
172	9	129	3.041	43.581
173	14	143	4.730	48.311
174	13	156	4.392	52.703
175	20	176	6.757	59.459
176	12	188	4.054	63.514
177	12	200	4.054	67.568
178	13	213	4.392	71.959
179	8	221	2.703	74.662
180	13	234	4.392	79.054
181	5	239	1.689	80.743
182	9	248	3.041	83.784
183	9	257	3.041	86.824
184	13	270	4.392	91.216
185	7	277	2.365	93.581
186	8	285	2.703	96.284
187	4	289	1.351	97.635
188	2	291	0.676	98.311
189	3	294	1.014	99.324
190	2	296	0.676	100.000

SOURCE: Educational Testing Service, Princeton, New Jersey (July 1986).

Table 21. PPST cumulative writing score frequency distribution for Native American, Eskimo and Aleut test takers, 1985-86.

WRITING	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
	2			
158	1	1	0.318	0.318
160	1	2	0.318	0.637
161	1	3	0.318	0.955
162	2	5	0.637	1.592
163	3	8	0.955	2.548
164	5	13	1.592	4.140
165	5	18	1.592	5.732
166	15	33	4.777	10.510
167	8	41	2.548	13.057
168	10	51	3.185	16.242
169	11	62	3.503	19.745
170	21	83	6.688	26.433
171	20	103	6.369	32.803
172	22	125	7.006	39.809
173	13	138	4.140	43.949
174	38	176	12.102	56.051
175	18	194	5.732	61.783
176	22	216	7.006	68.790
177	24	240	7.643	76.433
178	26	266	8.280	84.713
179	20	286	6.369	91.083
180	6	292	1.911	92.994
181	7	299	2.229	95.223
182	5	304	1.592	96.815
183	3	307	0.955	97.771
184	4	311	1.274	99.045
185	1	312	0.318	99.363
186	2	314	0.637	100.000

ESSAY	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
	2			
2	1	1	0.318	0.318
4	5	6	1.592	1.911
5	12	18	3.822	5.732
6	42	60	13.376	19.108
7	41	101	13.057	32.166
8	130	231	41.401	73.567
9	50	281	15.924	89.490
10	25	306	7.962	97.452
11	6	312	1.911	99.363
12	2	314	0.637	100.000

SOURCE: Educational Testing Service, Princeton, New Jersey (July 1986).

Table 22. PPST cumulative reading score frequency distributions for White test takers, 1985-86.

READING	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
	2329	.	.	.
154	1	1	0.003	0.003
155	1	2	0.003	0.005
156	1	3	0.003	0.008
157	9	12	0.023	0.031
158	18	30	0.046	0.077
159	30	60	0.077	0.154
160	51	111	0.131	0.284
161	74	185	0.190	0.474
162	146	331	0.374	0.848
163	166	497	0.425	1.273
164	293	790	0.751	2.024
165	464	1254	1.189	3.213
166	513	1767	1.314	4.527
167	824	2591	2.111	6.638
168	783	3374	2.006	8.644
169	908	4282	2.326	10.970
170	1108	5390	2.839	13.809
171	1624	7014	4.161	17.970
172	1412	8426	3.618	21.587
173	1546	9972	3.961	25.548
174	1751	11723	4.486	30.034
175	1980	13703	5.073	35.107
176	2435	16138	6.238	41.346
177	2157	18295	5.526	46.872
178	2256	20551	5.780	52.652
179	2221	22772	5.690	58.342
180	2308	25080	5.913	64.255
181	2201	27281	5.639	69.894
182	2203	29484	5.644	75.538
183	2388	31872	6.118	81.656
184	1895	33767	4.855	86.511
185	1706	35473	4.371	90.882
186	1362	36835	3.489	94.371
187	1333	38168	3.415	97.786
188	605	38773	1.550	99.336
189	242	39015	0.620	99.956
190	17	39032	0.044	100.000

SOURCE: Educational Testing Service, Princeton, New Jersey (July 1986).

Table 23. PPST cumulative math score frequency distributions for White test takers, 1985-86.

MATH	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
	953			
153	4	4	0.010	0.010
154	2	6	0.005	0.015
155	5	11	0.012	0.027
156	14	25	0.035	0.062
157	32	57	0.079	0.141
158	73	130	0.181	0.322
159	60	190	0.148	0.470
160	112	302	0.277	0.747
161	183	485	0.453	1.200
162	270	755	0.668	1.868
163	364	1119	0.901	2.769
164	353	1472	0.874	3.643
165	392	1864	0.970	4.613
166	528	2392	1.307	5.920
167	763	3155	1.888	7.808
168	929	4084	2.299	10.107
169	979	5063	2.423	12.530
170	1231	6294	3.046	15.576
171	1335	7629	3.304	18.880
172	1538	9167	3.806	22.686
173	1521	10688	3.764	26.450
174	1811	12499	4.482	30.932
175	1877	14376	4.645	35.577
176	1710	16086	4.232	39.809
177	2091	18177	5.175	44.984
178	2122	20299	5.251	50.235
179	2088	22387	5.167	55.402
180	1741	24128	4.309	59.711
181	2132	26260	5.276	64.987
182	2204	28464	5.454	70.441
183	2012	30476	4.979	75.421
184	1942	32418	4.806	80.227
185	1276	33694	3.158	83.384
186	1677	35371	4.150	87.535
187	1466	36837	3.628	91.163
188	1405	38242	3.477	94.640
189	1081	39323	2.675	97.315
190	1085	40408	2.685	100.000

SOURCE: Educational Testing Service, Princeton, New Jersey (July 1986).

Table 24. PPST cumulative writing score frequency distributions for White test takers, 1985-86.

WRITING	FREQUENCY	CUM FREQ	PERCENT	CUM PERCENT
	354			
152	1	1	0.002	0.002
155	3	4	0.007	0.010
156	1	5	0.002	0.012
157	1	6	0.002	0.015
158	4	10	0.010	0.024
159	4	14	0.010	0.034
160	7	21	0.017	0.051
161	15	36	0.037	0.088
162	44	80	0.107	0.195
163	54	134	0.132	0.327
164	67	201	0.163	0.490
165	101	302	0.246	0.736
166	326	628	0.795	1.531
167	292	920	0.712	2.244
168	492	1412	1.200	3.443
169	635	2047	1.549	4.992
170	1533	3580	3.738	8.730
171	1508	5088	3.677	12.408
172	1743	6831	4.250	16.658
173	2271	9102	5.538	22.196
174	4136	13238	10.086	32.282
175	3072	16310	7.491	39.774
176	3238	19548	7.896	47.670
177	3261	22809	7.952	55.622
178	4774	27583	11.642	67.264
179	2851	30434	6.952	74.217
180	2486	32920	6.062	80.279
181	2104	35024	5.131	85.410
182	2503	37527	6.104	91.514
183	1173	38700	2.860	94.374
184	945	39645	2.304	96.679
185	601	40246	1.466	98.144
186	483	40729	1.178	99.322
187	149	40878	0.363	99.685
188	101	40979	0.246	99.932
189	26	41005	0.063	99.995
190	2	41007	0.005	100.000

SOURCE: Educational Testing Service, Princeton, New Jersey (July 1986).